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wherein said first lock means [being operable to] is adapted to automatically prevent said saw unit from moving in the horizontal direction [in response to the] upon detection of movement of said saw unit in the vertical direction by a first sensor means, and the second lock means [being operable to] is adapted to automatically prevent the saw unit from moving in the vertical direction [in response to the] upon detection of movement of said saw unit in the horizontal direction by a second sensor means.

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2. (Twice Amended) The circular saw as defined in claim 1 wherein the circular saw includes the first lock means and said first lock means comprises a fixing member for fixing [operable to fix] said saw unit in position relative to said table in the horizontal direction[,], and an actuator for operating said fixing member[, and a first sensor means for detecting the vertical movement of said saw unit].

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3. (Twice Amended) The circular saw as defined in claim 2 wherein:

said support means includes a support arm mounted on said table, a slide member horizontally slidably relative to said support arm, and hinge means for vertically pivotally connecting said saw unit to said slide member; and

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said fixing member selectably fixes [of said first lock means is operable to fix] said slide member in position relative to said support arm, and said first sensor means detects [is operable to detect] the vertical pivotal movement of said saw unit relative to said slide member.

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4. (Amended) The circular saw as defined in claim 3 wherein:

said slide member comprises a slide shaft slidably inserted into a holder provided on said support arm;

said fixing member comprises a screw inserted into a threaded hole formed in said holder in a direction perpendicular to an axial direction of said slide shaft, said screw having one end abutting said slide shaft; and

said actuator rotating [serves to rotate] said screw in both clockwise and counterclockwise directions so as to move said screw toward and away from said slide shaft.

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6. (Twice Amended) The circular saw as defined in claim 4 wherein:

said first sensor means comprises a detector plate mounted on one of said slide shaft or said saw unit, and an optical sensor mounted on the other of said slide shaft and said saw unit;

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said detector plate having a plurality of parallel identification bars marked thereon, and said parallel bars being spaced from each other by a predetermined distance;

said optical sensor detecting [being operable to detect] movement of said parallel identification bars as a change in a reflected light pattern.

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7. (Twice Amended) The circular saw as defined in claim 1 wherein the circular saw includes the second lock means and said second lock means comprises a fixing member for fixing [operable to fix] said saw unit in position relative to said table in the vertical direction, an actuator for operating said fixing member, and second sensor means for detecting the horizontal movement of said saw unit.

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8. (Twice Amended) The circular saw as defined in claim 7 wherein:

said support means includes a support arm mounted on said table, a slide member horizontally slidable relative to said support arm, and hinge means for vertically pivotally connecting said saw unit to said slide member; and

said fixing member of said second lock means selectively fixes [is operable to fix] the pivotal position of said saw unit relative to said slide member, and said second sensor

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means detects [is operable to detect] the horizontal slide movement of said slide member relative to said support arm.

Claim 9, line 11 cancel "serves to rotate" and replace it with -- rotating --.

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11. (Twice Amended) The circular saw as defined in claim 9 wherein:

said first sensor means includes a plurality of parallel identification bars marked on said slide shaft and includes an optical sensor provided on said holder;

said parallel bars being spaced from each other by a predetermined distance in a longitudinal direction of said slide shaft; and

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said optical sensor detects [being operable to detect] movement of said parallel identification bars as a change in a reflected light pattern.

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13. (Twice Amended) The circular saw as defined in claim 12 wherein:

said first lock means includes a first fixing member for fixing [operable to fix] said saw unit in position relative to said table in the horizontal direction[,] and a first actuator coupled to the first fixing member, said first actuator

moving [causing] said first fixing member [to move] between a locked position and an unlocked position[, and a first sensor means for detecting the vertical movement of said saw unit coupled to said first actuator]; and

said second lock means includes a second fixing member for fixing [operable to fix] said saw unit in position relative to said table in the vertical direction[,] and a second actuator coupled to the second fixing member, said second actuator moving [causing] said second fixing member [to move] between a locked position and an unlocked position[, and a second sensor means for detecting the horizontal movement of said saw unit coupled to said second actuator].

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14. (Twice Amended) The circular saw as defined in claim 13 wherein:

said support means includes a support arm mounted on said table and a slide shaft coupled to the support arm, [whereby] wherein the slide shaft slides [can slide] horizontally relative to said support arm, and a hinge means coupling the slide shaft to the saw unit, [whereby] wherein the slide shaft pivots [can pivot] vertically relative to said saw unit;

said first fixing member of said first lock means selectably fixing [is operable to fix] said slide shaft in position relative to said support arm, and said first sensor means detecting [detects] vertical pivotal movement of said

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saw unit relative to said slide shaft; and
said second fixing member of said second lock means
selectably fixing [is operable to fix] the pivotal position of
said saw unit relative to said slide shaft, and said second
sensor means detecting [detects] horizontal movement of said
saw unit relative to said support arm.

15. (Three Times Amended) The circular saw as defined in
claim 14 wherein:

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said slide shaft is slidably received in a holder
provided on said support arm;

said first fixing member comprises a first screw inserted
into a first threaded hole formed in said holder in a
direction perpendicular to an axial direction of said slide
shaft, said first screw having one end for abutting [that can
abut] said slide shaft;

said first actuator rotating [is adapted to rotate] said
first screw in both clockwise and counterclockwise directions
so as to move said first screw toward and away from said slide
shaft;

said second fixing member comprises a second screw
inserted into a second threaded hole formed in said saw unit
in a direction parallel to the pivotal axis of said saw unit;

and wherein the circular saw further comprises a flange
portion having an abutting surface extending within a plane

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perpendicular to the pivotal axis of said saw unit, and is disposed such that one end of said second screw selectively abuts [can abut] said abutting surface of said flange portion; and

said second actuator rotating [is adapted to rotate] said second screw in both clockwise and counterclockwise directions so as to move said second screw toward and away from said abutting surface.

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17. (Twice Amended) The circular saw as defined in claim 15 wherein:

said first sensor means comprises a detector plate mounted on either said slide shaft or said saw unit, and a first optical sensor mounted on the other of said slide shaft and said saw unit;

said detector plate having a plurality of first parallel identification bars marked thereon, and said first parallel identification bars being spaced from each other by a predetermined distance;

said first optical sensor detecting [being operable to detect] movement of said first parallel identification bars as a change in a reflected light pattern;

said second sensor means comprises a plurality of second parallel identification bars marked on said slide shaft and includes a second optical sensor provided on said holder;

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said second parallel identification bars being spaced from each other by a predetermined distance in a longitudinal direction of said slide shaft; and

said second optical sensor detecting [being operable to detect] movement of said second parallel identification bars as a change in a reflected light pattern.

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18. (Twice Amended) An apparatus comprising:

a table,

a saw blade coupled to the table, the saw blade being movable at least in a horizontal direction relative to the table and a vertical direction relative to the table and

at least one lock selected from the group consisting of a first lock and a second lock, wherein:

the first lock is coupled to the table and the saw blade, wherein the first lock automatically prevents [can be operated to prevent] the saw blade from moving in the horizontal direction relative to the table when a first sensor detects the saw blade [is] moving in the vertical direction and automatically permits the saw blade to move in the horizontal direction after the first sensor detects the saw blade has stopped moving in the vertical direction and

the second lock is coupled to the table and the saw blade, wherein the second lock automatically prevents [can be operated to prevent] the saw blade from moving in the vertical

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direction relative to the table when a second sensor detects the saw blade [is] moving in the horizontal direction and automatically permits the saw blade to move in the vertical direction after the second sensor detects the saw blade has stopped moving in the horizontal direction.

Cancel claim 20.

Claim 21, line 1, replace "20" with -- 19 --.

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22. (Twice Amended) An apparatus as in claim 21, further comprising:

a support arm mounted on the table and coupled to the saw blade,

a slide shaft coupled to the support arm, [whereby] wherein the slide shaft slides [can slide] horizontally [slidable] relative to the support arm and

a vertically pivotable hinge coupling said saw blade to the slide shaft, wherein:

the first sensor detects [can detect] vertical pivotal movement of the saw blade relative to the slide shaft and the first lock selectably fixes [can fix] the slide shaft in a position relative to the support arm in response to detection of vertical pivotal movement and

the second sensor detects [can detect] horizontal

movement of the saw blade relative to the support arm and the second lock selectably fixes [can fix] the saw blade in a position relative to the slide shaft in response to detection of horizontal [pivotal] movement.

23. (Twice Amended) An apparatus as in claim 22 wherein:
the slide shaft is slidably received in a holder connected to the support arm,

the first lock comprises a first screw inserted into a first threaded hole formed in the holder in a direction perpendicular to an axial direction of the slide shaft, the first screw having one end abutting [that can abut] the slide shaft, wherein the first screw is coupled to the first actuator and the first actuator rotates [can rotate] the first screw in both clockwise and counterclockwise directions so as to move the first screw toward and away from the slide shaft,

the second lock comprises a second screw inserted into a second threaded hole formed in the saw unit in a direction parallel to the vertical pivotal axis of the apparatus,

and wherein the apparatus further comprises a flange portion having an abutting surface extending within a plane perpendicular to the vertical pivotal axis of the saw blade, and is disposed such that one end of the second screw selectively abuts [can abut] the abutting surface of the flange portion and wherein the second screw is coupled to the

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second actuator and the second actuator rotates [can rotate] the second screw in both clockwise and counterclockwise directions so as to move the second screw toward and away from the abutting surface.

25. (Twice Amended) An apparatus as in claim 24 further comprising:

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a first detector plate mounted on either the slide shaft or the support arm, wherein the first sensor [is] includes a first optical sensor mounted on the other of the slide shaft and the support arm, the first detector plate having a plurality of first parallel identification bars that are spaced from each other by predetermined distances, and the first sensor is disposed in relation to the first detector plate such that the first sensor detects [can detect] movement of the first parallel identification bars as a change in a reflected light pattern and

a plurality of second parallel identification bars marked on the slide shaft, wherein the second sensor [is] includes a second optical sensor coupled to the holder, the second parallel identification bars are spaced from each other by predetermined distances in a longitudinal direction of the slide shaft and the second optical sensor is disposed in relation to the second parallel identification bars such that the second sensor detects [can detect] movement of the second

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parallel identification bars as a change in a reflected light pattern.

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26. (Amended) An apparatus comprising:

a table having a surface for placing a workpiece thereon,
a saw having a saw blade,

a first means for axially displacing the saw relative to
the table, [such that] wherein the first means enables the saw
[can] to move in a horizontal plane that is parallel to the
surface of the table[, the first means] and is coupled to the
table and the saw,

a second means for vertically pivoting the saw relative
to the table, [such that] wherein the second means enables the
saw [can] to move in a vertical plane relative to the surface
of the table[, the second means] and is coupled to the table
and the saw,

a first lock coupled to the first means, [and being
operable to automatically prevent] wherein the first lock
automatically prevents horizontal movement of the saw [when]
upon detection by a first sensor of the saw [is] pivotally
moving in the vertical plane and

a second lock coupled to the second means, [and being
operable to automatically prevent] wherein the second lock
automatically prevents vertical pivotal movement of the saw

[when] upon detection by a second sensor of the saw [is]
moving in the horizontal plane.

27. (Amended) An apparatus as in claim 26, wherein the first lock comprises a first screw, wherein the first screw fixes [that can fix] the saw in position relative to the table in the horizontal plane when the first screw engages the first means.

28. (Amended) An apparatus as in claim 27 further comprising:

[a first sensor disposed on the saw, wherein the first sensor detects pivotal movement of the saw in the vertical plane and]

a first actuator coupled to the first sensor and the first screw, wherein the first actuator rotates the first screw in response to detection by the first sensor of pivotal movement of the saw in the vertical plane.

29. (Amended) An apparatus as in claim 28, wherein the second lock comprises a second screw, wherein the second screw fixes [that can fix] the saw in position relative to the table in the vertical plane when the second screw engages the second means.

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30. (Amended) An apparatus comprising:
a table having a surface for placing a workpiece thereon,
a saw having a saw blade,
a support arm coupled to the saw,
a holder connected to the support arm,
a shaft slidably received within the holder and
a hinge connecting the holder to the saw, the hinge
permitting vertical pivotal movement of the saw relative to
the shaft,
a first lock coupled to the first means, [and being
operable to automatically prevent] wherein the first lock
automatically prevents horizontal movement of the saw [when]
without operator assistance upon detection by a first sensor
of the saw [is] pivotally moving in the vertical plane and
a second lock coupled to the second means, [and being
operable to automatically prevent] wherein the second lock
automatically prevents vertical pivotal movement of the saw
[when] without operator assistance upon detection by a second
sensor of the saw [is] moving in the horizontal plane.

31. (Amended) An apparatus comprising:

a table having a surface for placing a workpiece thereon,
a saw having a saw blade,
a support arm coupled to the saw,
a holder connected to the support arm,

a shaft slidably received within the holder and
a hinge connecting the holder to the saw, the hinge
permitting vertical pivotal movement of the saw relative to
the shaft,

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a first lock coupled to the holder for [and being
operable to] automatically preventing [prevent] horizontal
movement of the saw without operator assistance when [the saw
is pivotally moving] the initiation of pivotal movement of the
saw blade in the vertical plane is detected by a first
detector, and

a second lock coupled to the hinge for [and being
operable to] automatically preventing [prevent] vertical
pivotal movement of the saw without operator assistance when
[the saw is moving] the initiation of movement of the saw
blade in the horizontal plane is detected by a second
detector.

32. (Amended) An apparatus as in claim 31 further
comprising:

a first screw disposed within the first lock,
[a first sensor disposed on the saw, wherein the first
sensor detects pivotal movement of the saw in the vertical
plane],

a first solenoid coupled to the first sensor and the
first screw, wherein the first solenoid rotates the first

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screw in response to detection by the first sensor of pivotal movement of the saw in the vertical plane, thereby causing the first screw to abut against the shaft and prevent horizontal movement of the slide shaft,

a flange coupled to the hinge,

a second screw disposed within the second lock,

[a second sensor disposed on the saw, wherein the second sensor detects movement of the saw in the horizontal plane] and

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a second solenoid coupled to the second sensor and the second screw, wherein the second solenoid rotates the second screw in response to detection by the second sensor of movement of the saw in the horizontal plane, thereby causing the second screw to abut against the flange and prevent vertical pivotal movement of the saw.

Please add the following new claims:

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38. (New) An apparatus comprising:

a table,

a saw coupled to the table, the saw being movable at least in a horizontal direction relative to the table and a vertical direction relative to the table;

a sensor, wherein the sensor detects movement of the saw in the vertical direction relative to the table; and,

a first lock coupled to the sensor, wherein the first lock automatically prevents horizontal movement of the saw upon detection by the first sensor of the saw pivotally moving in the vertical direction relative to the table.

34. (New) An apparatus comprising:

a table,

a saw coupled to the table, the saw being movable at least in a horizontal direction relative to the table and a vertical direction relative to the table;

a sensor, wherein the sensor detects movement of the saw in the horizontal direction relative to the table; and,

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a first lock coupled to the sensor, wherein the first lock automatically prevents vertical movement of the saw upon detection by the first sensor of the saw moving in the horizontal direction relative to the table.

REMARKS

The Office Action dated July 19, 2000, has been received and carefully reviewed. The rejections raised in that Office Action were discussed with the examiner during an interview on November 9, 2000, and as an initial matter, Applicant's attorney would like to thank the examiner for the courtesies extended during the interview. Changes to place all claims in